



BIG DATA

Interdisciplinary Data Sciences Consortium



* IDSC Seminar Series *

October 14, 2016 2:00pm-3:00pm

Location: ENB 313

Presents

Dr. Hui Zhang,

Biostatistics MS 768
St. Jude Children's Research Hospital
262 Danny Thomas Place
Memphis, TN 38105-3678

Title: Major Statistical Challenges in Count Data Analysis

Abstract: Count data plays an important role in biomedical and clinical research, especially nowadays with the rapid biomedical technique progresses including next generation sequencing. However, using routine statistical model to analyze counts, such as Poisson model, often results in biased or even misleading conclusions. Primary challenges when applying Poisson model to count data include overdispersion and zero-inflation, which are commonly encountered in practice. In addition, the repeated measures and incomplete observations in modern clinical trials and survey studies add to complexity. This talk will review these challenges in count data analysis and recent methodology progresses made by the speaker's group.



Biography: Dr. Hui Zhang received his Ph.D. of Statistics from University of Rochester and currently is the Associate Member at Department of Biostatistics, St. Jude Children's Research Hospital. He has developed his expertise in design of clinical trials, longitudinal data, categorical data and missing data analysis. Recently, he is developing non-parametric statistical methods for RNA-Seq count data, as well as neuroscience data. He is the life-time member of International Chinese Statistical Association (ICSA), and was elected as the President of West Tennessee Chapter of American Statistical Association earlier this year.

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